



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/531,569

04/18/2005

Tao Zhang

11005.0065-00000

1394

22852

7590

08/21/2009

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

SHIFERAW, ELENI A

ART UNIT

PAPER NUMBER

2436

MAIL DATE

DELIVERY MODE

08/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/531,569	Applicant(s) ZHANG ET AL.	
	Examiner ELENI A. SHIFERAW	Art Unit 2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/13/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The objection to the IDS's submitted on 05/13/2009 is fully considered and an initialized copy herein attached.
2. Claims 1-5 and 7-10 are pending.

Response to Arguments

6. Applicant's arguments filed 05/13/2009 have been fully considered but they are moot in view of new ground of rejection.
3. The objection to claim 4 is withdrawn in view of applicant's amendment.
4. The 101 rejection is still maintained because:
5. Applicant referencing from the background of his invention is not persuasive because the background is also disclosing the protocol/instruction implemented in the device(s). Applicant submitting a reference by IDS and citing section A. 3 arguing "Media Gateway Control Protocol"(MGCP) as not being a protocol/instruction but a machine is not persuasive because even the applicant's reference on the IDS discloses the MGCP as a protocol/instruction(s) ... "The MGCP implements the media gateway control interface as a set of transactions comprising eight commands, The first four commands are sent by MGC to a gateway... It is clear that the MGCP/MGC is a protocol/instruction within the device.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Art Unit: 2436

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim(s) 1-5 and 7-8 is/are rejected under 35 U.S.C. 101 as not being statutory. While the claims recite a series of steps or acts to be performed, a statutory “process” under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process. The method including steps of ... is broad enough that the claim could be completely performed mentally, verbally or without a machine nor is any transformation apparent.

8. Claims 9-10 are rejected under 101 because it is directed to non-statutory subject matter as failing to fall within a statutory category and as being directed to software per se (although the preamble of claim 1 recites "A system" it does not inherently mean that the claim is directed to a machine). There is not hardware element claimed in the body of the claim. The specification also describes, the MGC as a protocol. Therefore, claims 9-10 are software per se. and the machine claim does not recite any hardware element. See MPEP 2106. Appropriate correction is required.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2436

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 4, 5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6961857 (Floryanzia) in view of Borella et al. 6353891 B1. and further in view of “INTERNATIONAL TELECOMMUNICATION UNION, Series J: Cable Networks and Transmission of Television, Sound Programme and Other Multimedia Signals – IPcablecom Trunking Gateway Control Protocol (TGCP), February 2002, J.171” *herein after (ITU)*.

As to claims 1, 7 and 9, Floryanzia discloses an authentication method/system for network security, comprising the following configuring a Media Gateway (MG) with an authentication key, and setting a security data package on a network protocol, by a Media Gateway Controller (MGC) (Floryanzia column 3, lines 54-67; a Gateway sends an Access Token in all Registration Request messages. The Access Token contains information that authenticates the Gateway to the Gatekeeper. The Gatekeeper formats a message to an authentication server that will authenticate the information contained in the token, and the server responds with either an Access-Accept or Access-Reject message and also see col. 2 lines 49-60; ITU-T Recommendation H.235 of February, 1998 describes security and encryption for H-series multimedia terminals, including H.323 and other H.245-based terminals. Section 10.3.3 of H.235 specifies that data structures carrying encrypted information, called "cryptoTokens," can be used to allow

Art Unit: 2436

endpoints to authenticate themselves to one another....);

during a security authentication, by the MGC, sending security authentication request containing a security authentication parameter to the MG using the data package (**Floryanzia column 4, lines 23-31; receiving non-encrypted authentication request information comprises the steps of *receiving an access token comprising a general identifier value, a time stamp value, a challenge value, and a random value.* In a related feature, the step of receiving non-encrypted authentication request information comprises the steps of receiving an H.235 ClearToken comprising a general identifier value, a time stamp value, a challenge value, and a random value);**

performing an encryption calculation according to the security parameter and the authentication key and reporting a calculation result to the MGC, by the MG, (**Floryanzia column 10, lines 1-43; an encryption calculation is performed according to the security parameter and the authentication key and/or generating CHAP protocol response using the alias, password, and the CHAP Challenge values that the authentication server has received from the Gatekeeper in the Access Request packet. In one specific embodiment, the response is computed as: $\text{Response} = [\text{CHAP ID} + \text{User Password} + \text{CHAP Challenge}] \text{MD5 Hash} \dots$ and the Gatekeeper responds to the Gateway with a Registration Confirm (RCF) message); and**

determining whether the MG is legal by computing the calculation result with a result calculated by the MGC (**Floryanzia column 10, lines 1-43; it is also determined whether the response it has generated matches attributes of the Access Token. The determination is carried out by determining whether the Response matches a Challenge that is computed**

Art Unit: 2436

from the Access Request message attributes as follows: Challenge=[Random value+Gateway User Password+Time Stamp value]MD5 Hash. If the computed Response matches the computed Challenge, based on the values received from the Gatekeeper, then sending an Access Accept packet to the Gatekeeper. If the computed Response does not match the computed Challenge, or the alias of the requesting Gateway is not in a database of the authentication server, sending an Access Reject packet back to the Gatekeeper.... and the Gatekeeper responds to the Gateway with a Registration Confirm (RCF) message).

Floryanzia fails to disclose the determining step by the MGC by computing the calculation result with the result calculated by the MGC.

However Borella et al. discloses determining by the MGC whether the MG is legal by computing the calculation result with a result calculated by the MG (see fig. 3 and 5; wherein **only two devices RSIP host and RSIP gateway are both used to calculate a calculated result based on a received parameters and determine legality**).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the teachings of Borella et al. within the system of Floryanzia because they are analogous in hash authentication and access controlling and determination. One would have been motivated to incorporate the teachings to generate authentication locally and enhance security.

The combination fails explicitly disclose configuring step before initiating an authenticating request as argued by the applicant. However reference ITU discloses configuring step before initiating an authenticating request (see section A. 3).

Art Unit: 2436

Therefore it would have been obvious to one having ordinary skill at the time of the invention was made to well-known include the configuring step before authenticating because to authenticate the system must be configured first.

As to claims 4, 8 and 10, Floryanzia discloses the authentication method/system for network security, wherein said data package comprises a security authentication request signal and a security authentication completion event, said security authentication request signal comprises a security authentication parameter, and said security authentication completion event comprises a security authentication result parameter (Floryanzia column 8, lines 5-34) and wherein the step of reporting a calculation result includes reporting by MG the calculation result to the MGC via a security authentication completion event in a data package (see fig. 3C element 332 and 336 and column 3, lines 54-67).

As to claim 5, (Currently Amended) Floryanzia discloses the authentication method for network security according to claim 4, wherein the security authentication parameter is a random number (see col. 4 lines 23-31 and col. 10 lines 1-42; random value)

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2436

12. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6961857 (Floryanzia), Borella et al. 6353891 B1 and “INTERNATIONAL TELECOMMUNICATION UNION, Series J: Cable Networks and Transmission of Television, Sound Programme and Other Multimedia Signals – IPCablecom Trunking Gateway Control Protocol (TGCP), February 2002, J.171” *herein after (ITU)* and further in view of US 20020120760 (Kimchi).

As to claim 2, (Original) Floryanzia, Borella et al. and ITU teach the authentication method for network security according to claim 1. The combination fail to teach wherein said network protocol is Media Gateway Control Protocol (MGCP).

However, Kimchi discloses wherein said network protocol is Media Gateway Control Protocol (MGCP) (Kimchi paragraph 0036, lines 1-17).

It would be obvious to one of ordinary skill in the art at the time of the applicant's invention that the MGCP is one of the proposed upgrades for the older H. 323 standard (Kimchi paragraph 0036, lines 1-17).

As to claim 3, (Original) the combination teach the authentication method for network security according to claim 1. The combination fail to teach wherein said network protocol is H248 protocol.

However, Kimchi discloses wherein said network protocol is H248 protocol (Kimchi paragraph 0036, lines 1-17).

It would be obvious to one of ordinary skill in the art at the time of the applicant's invention that the H248 is another proposed upgrade for the older H. 323 standard (Kimchi paragraph 0036, lines 1-17).

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELENİ A. SHİFERAW whose telephone number is (571)272-3867. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser R. Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eleni A Shiferaw/
Examiner, Art Unit 2436